

## WHAT IS CLAIMED IS:

1. Apparatus for neutralizing the electrostatic charge in hydrocarbon fluid by corona discharge, comprising:

5           a mass of filter material;  
              an electrical conductor having branched conductive paths; and  
              means for directing the flow of hydrocarbon fluid to be treated through said mass of filter  
10          material and in contact with said conductor,  
              whereby the electrostatic charge in the fluid is neutralized by corona discharge.

2. The apparatus defined in Claim 1 wherein said  
15          conductor is connected to electrical ground.

3. The apparatus defined in Claim 2 wherein said conductor is located downstream of said mass of filter material.

20          4. The apparatus defined in Claim 3 wherein said conductor is an anti-static cord.

25          5. The apparatus defined in Claim 4 wherein said conductor is an anti-static tinsel.

6. The apparatus defined in Claim 1 wherein said electrical conductor includes a perforated electrically conductive tube with apertures being defined by pointed edges.

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7. The apparatus defined in Claim 6 wherein the pointed edges extend radially inward from the apertures.

8. The apparatus defined in Claim 1 wherein said  
10 electrical conductor is formed of an electrically conductive mesh material.

9. The apparatus defined in Claim 8 wherein the mesh material is stainless steel.

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10. The apparatus defined in Claim 8 wherein said mass of filter material surrounds a centrally disposed perforated tube and said mesh material is caused to surround at least a portion of said perforated tube.

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11. The apparatus defined in Claim 1 wherein said electrical conductor includes electrically connected metal fibers.

12. Apparatus for neutralizing the electrostatic charge in hydrocarbon fluid by corona discharge comprising:

central perforated tube;  
5 a mass of filter material surrounding said tube;  
an electrical conductor interdigitated between said tube and said mass of filter material; and  
means for directing the flow of hydrocarbon 10 fluid to be treated through said mass of filter material and in contact with said conductor, whereby the electrostatic charge in fluid is neutralized by corona discharge.